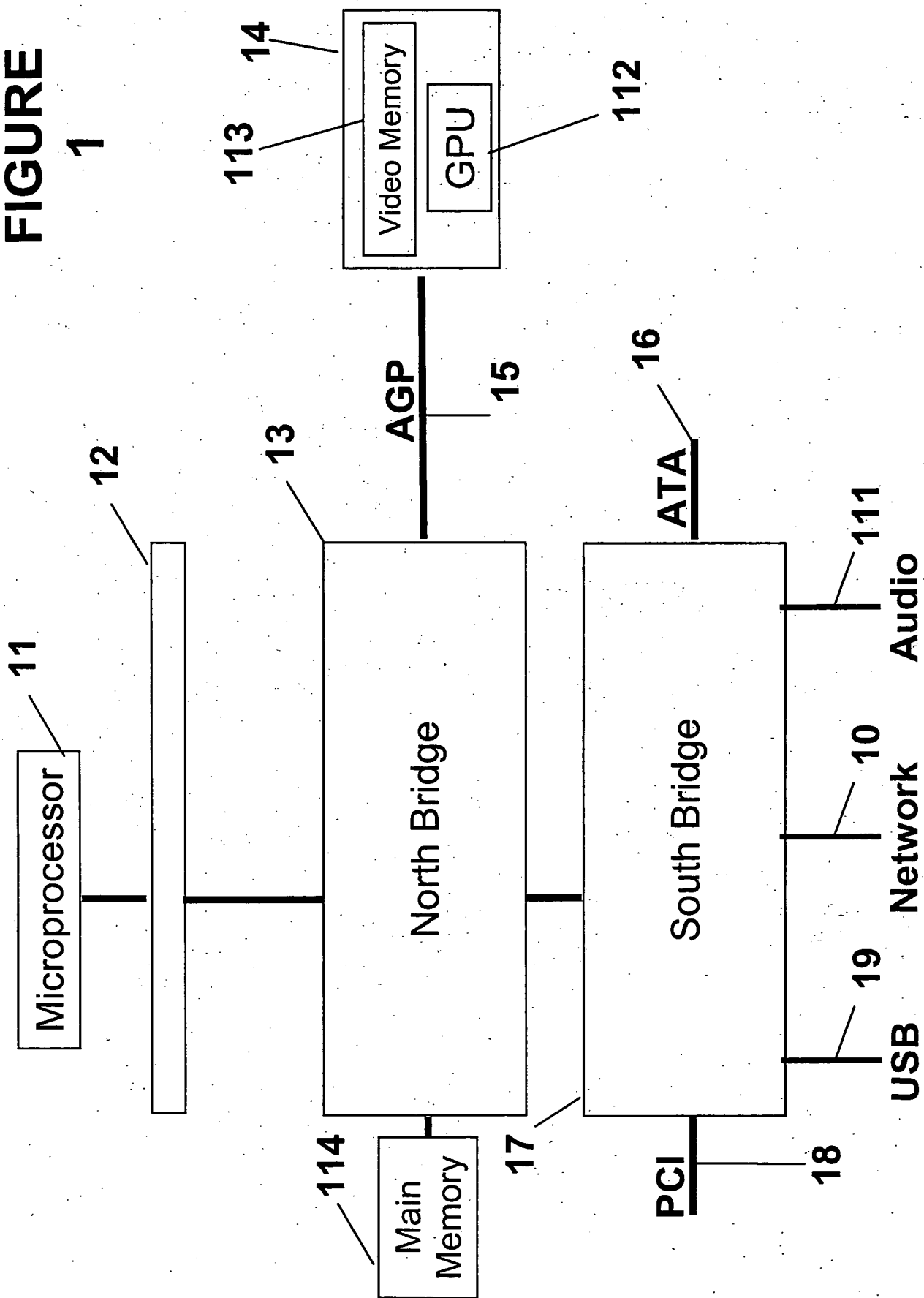
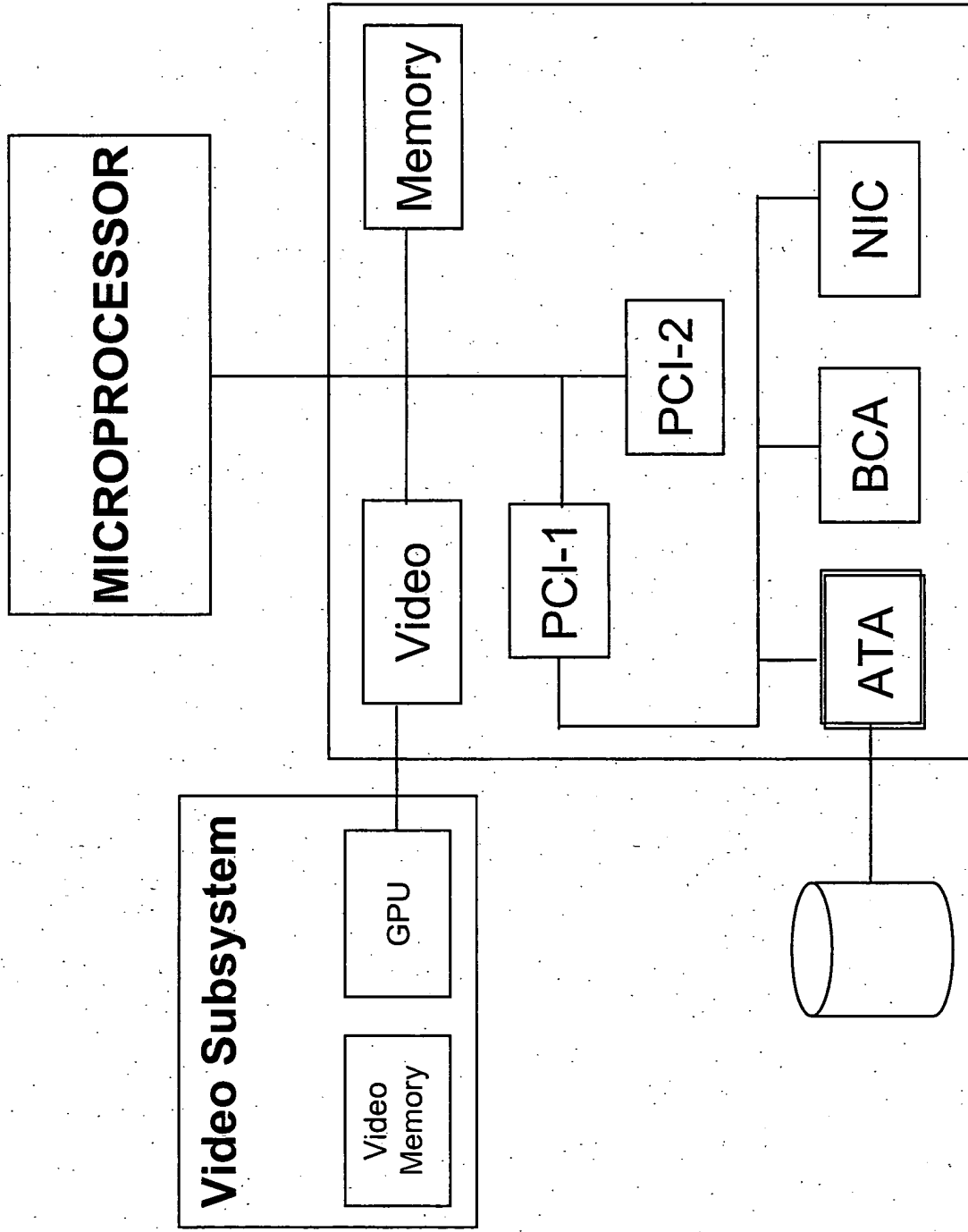


FIGURE
1



**FIGURE 2(a)**

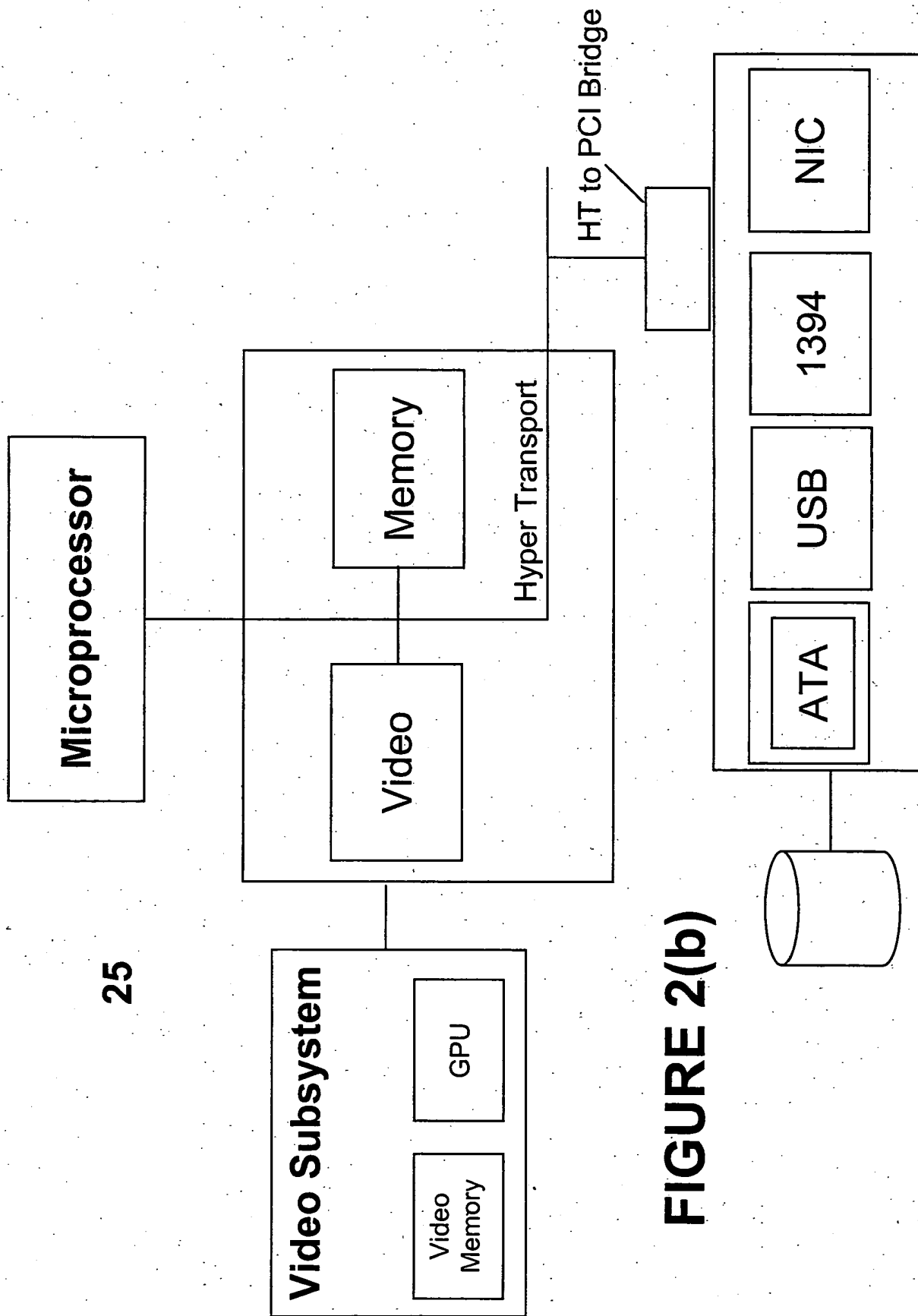


FIGURE 2(b)

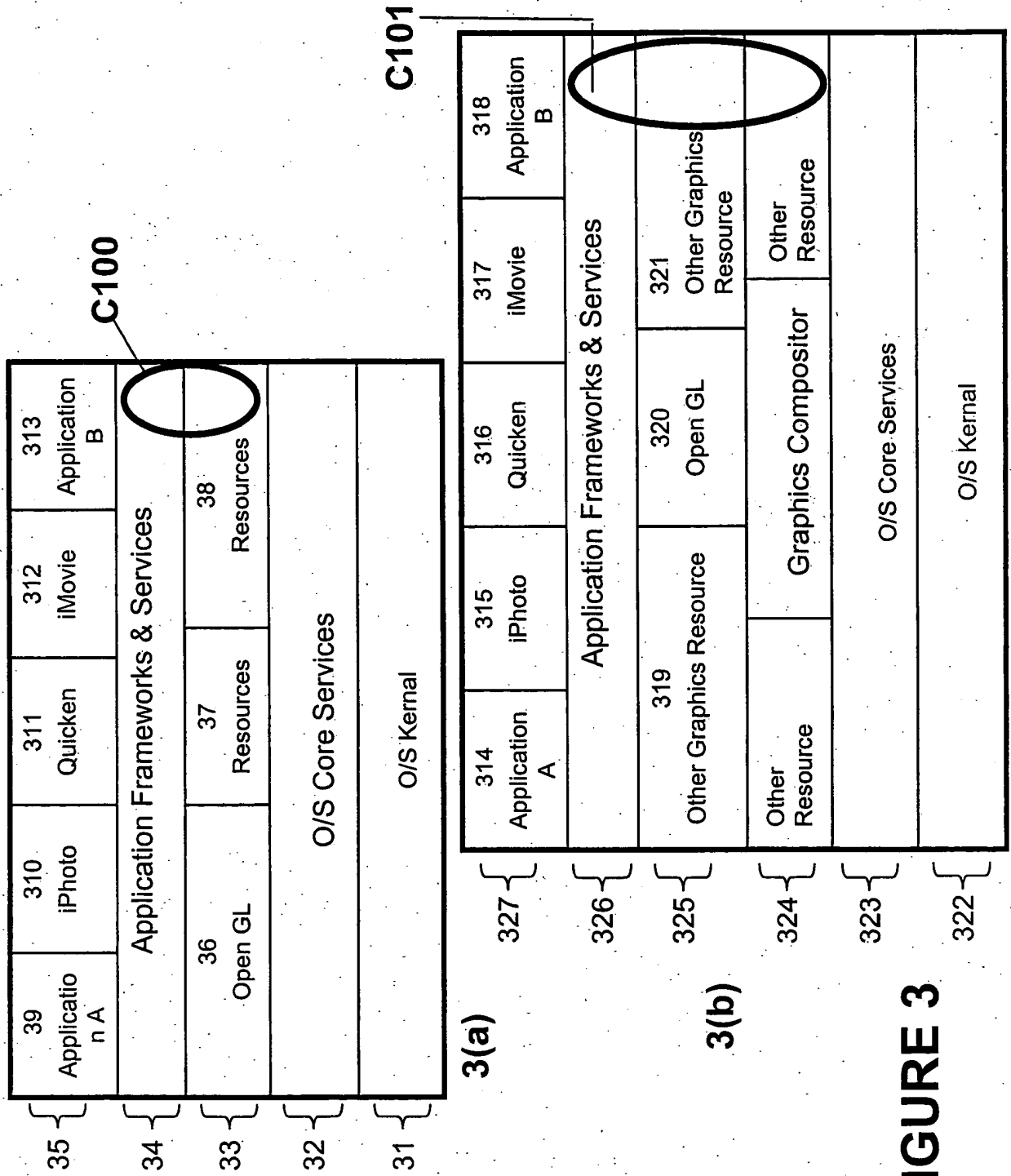


FIGURE 3

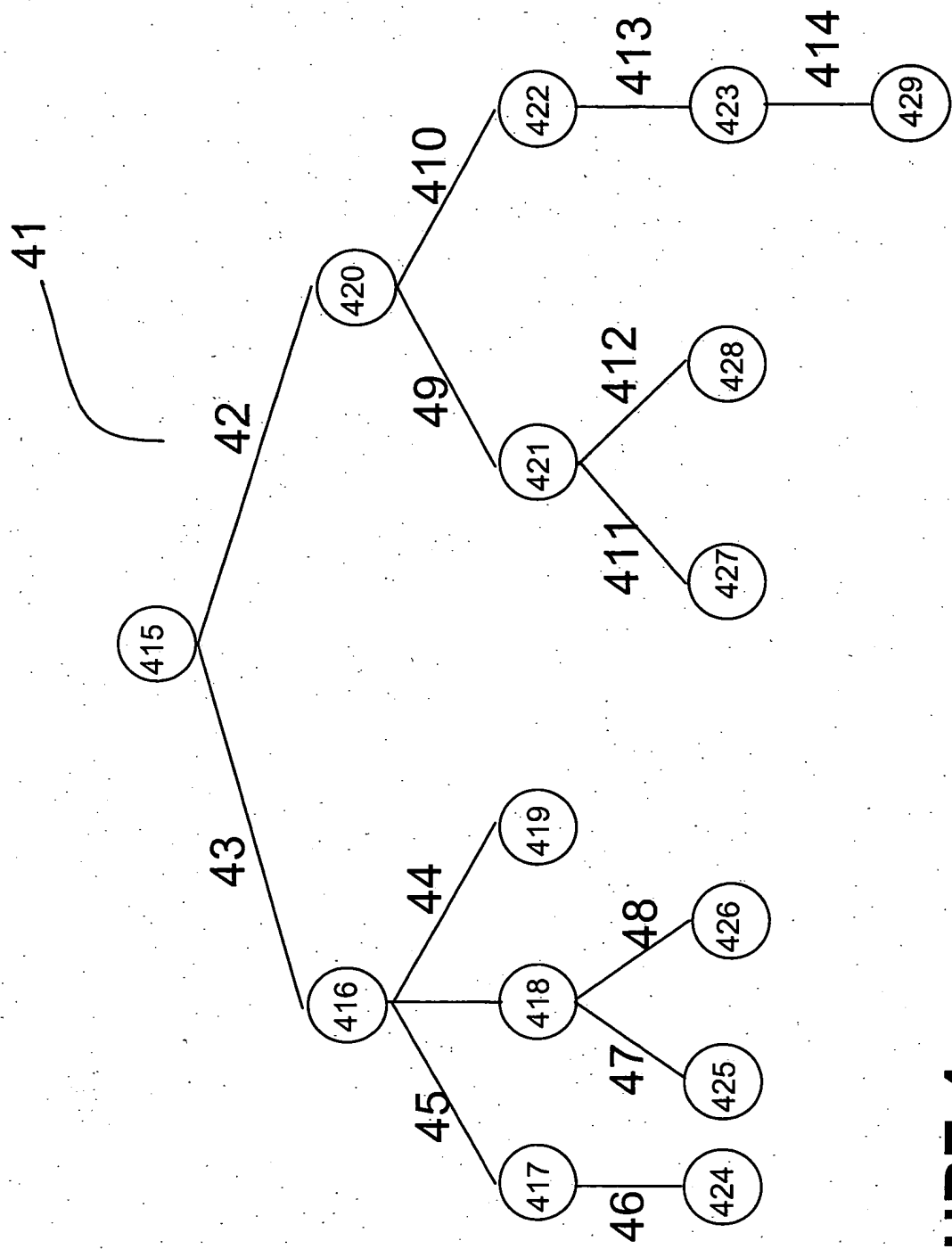
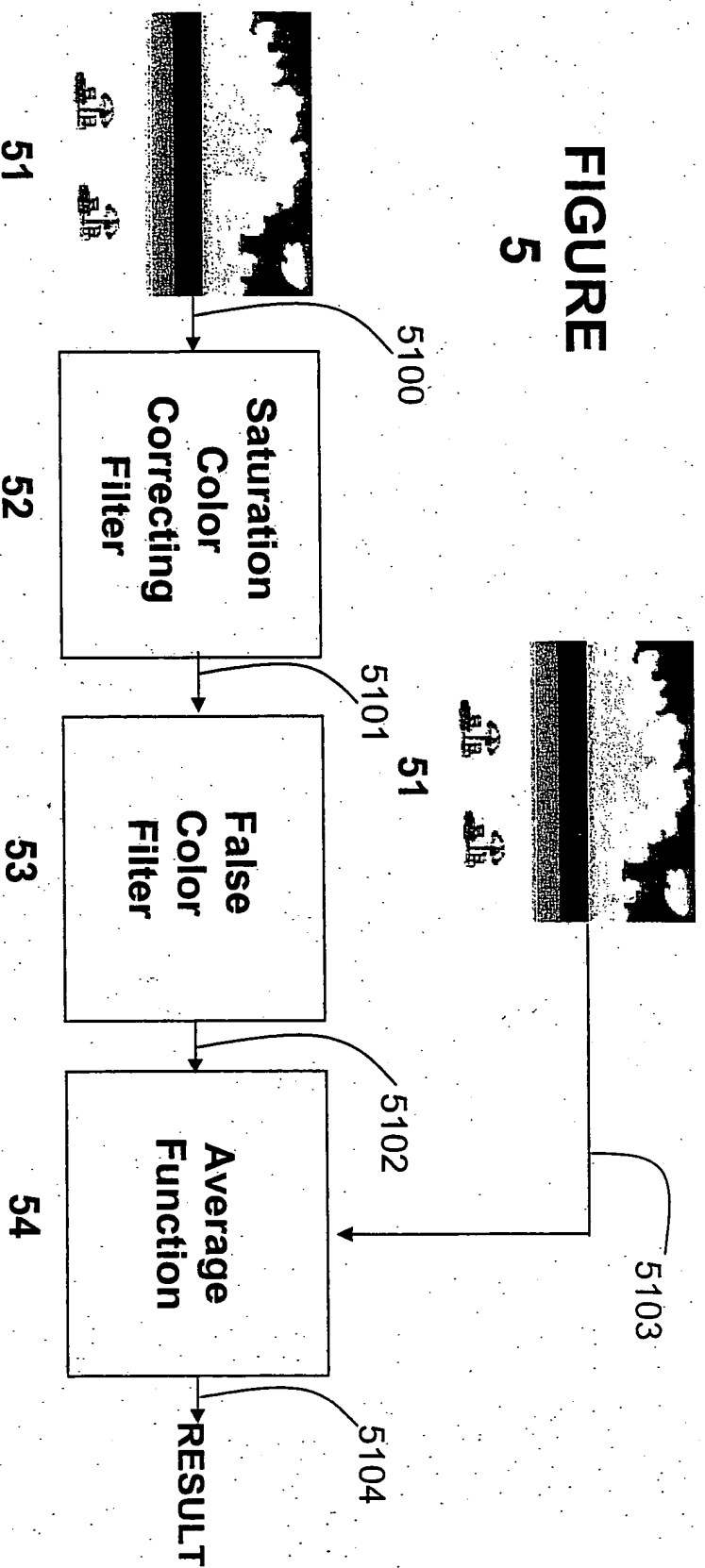


FIGURE 4

FIGURE 5



High-level Code Examples:

1. Allocate 51
2. Apply 52 to 51, parameters = (X, Y, Z, W), input = 51 (Sea Shore image), output = [place holder] CC sea shore
3. Apply 53, parameters (X, Y, Z, W), input = cc sea shore, output = [place holder] FC CC sea shore
4. Apply 54, parameters (X, Y, Z, W), input buffer 53, input Sea Shore image, output = [place holder] sea shore result

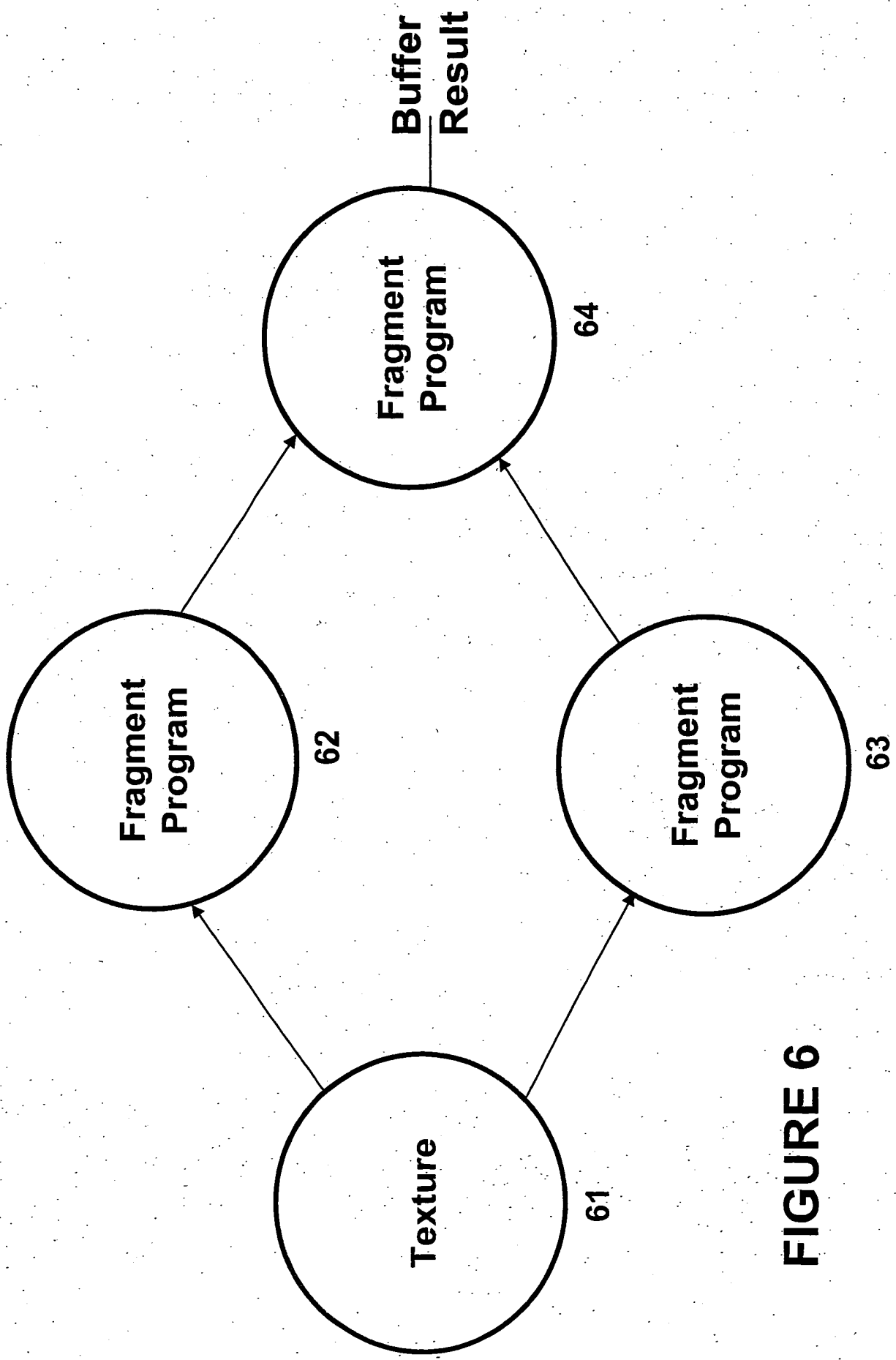


FIGURE 6

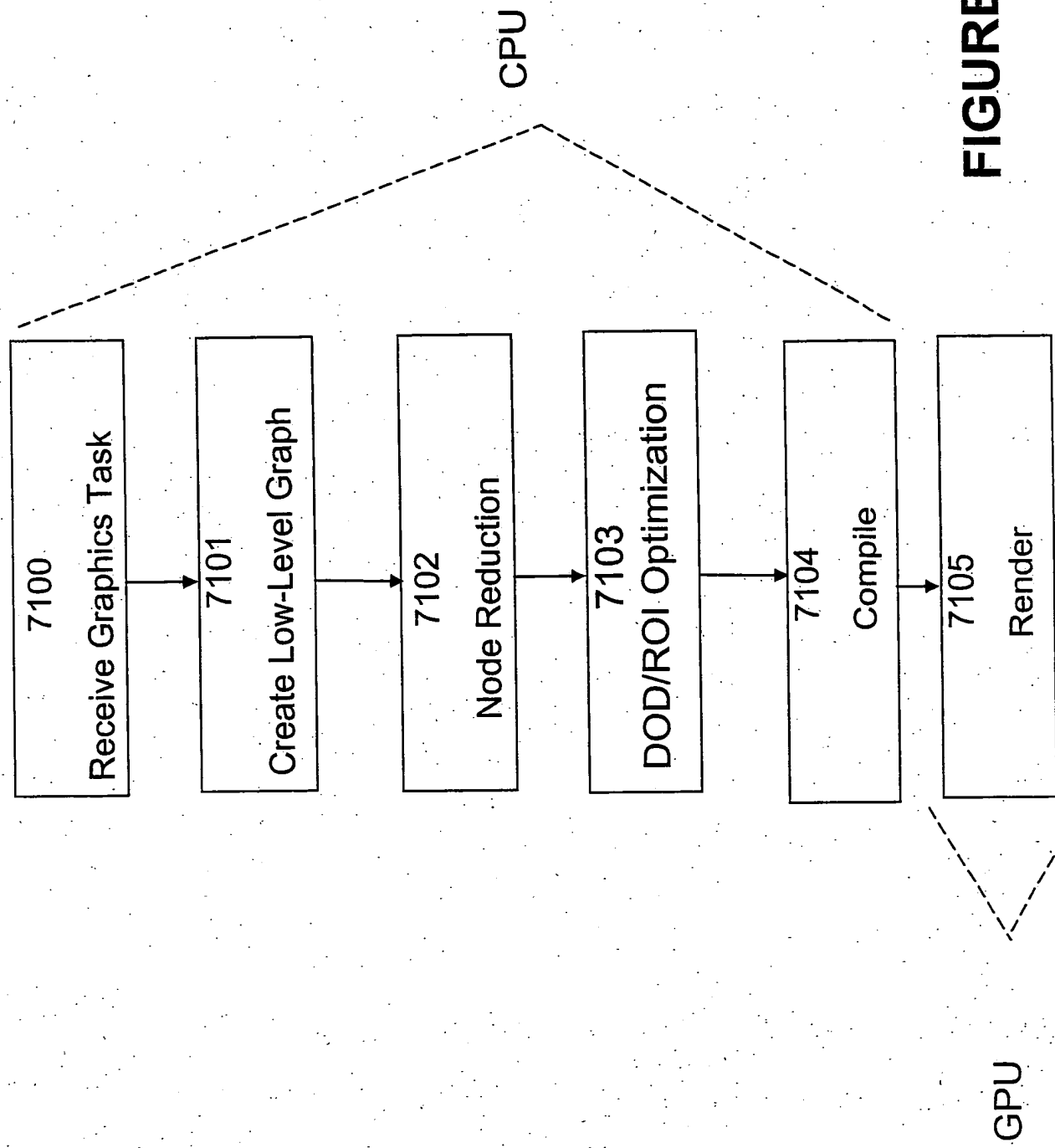


FIGURE 7

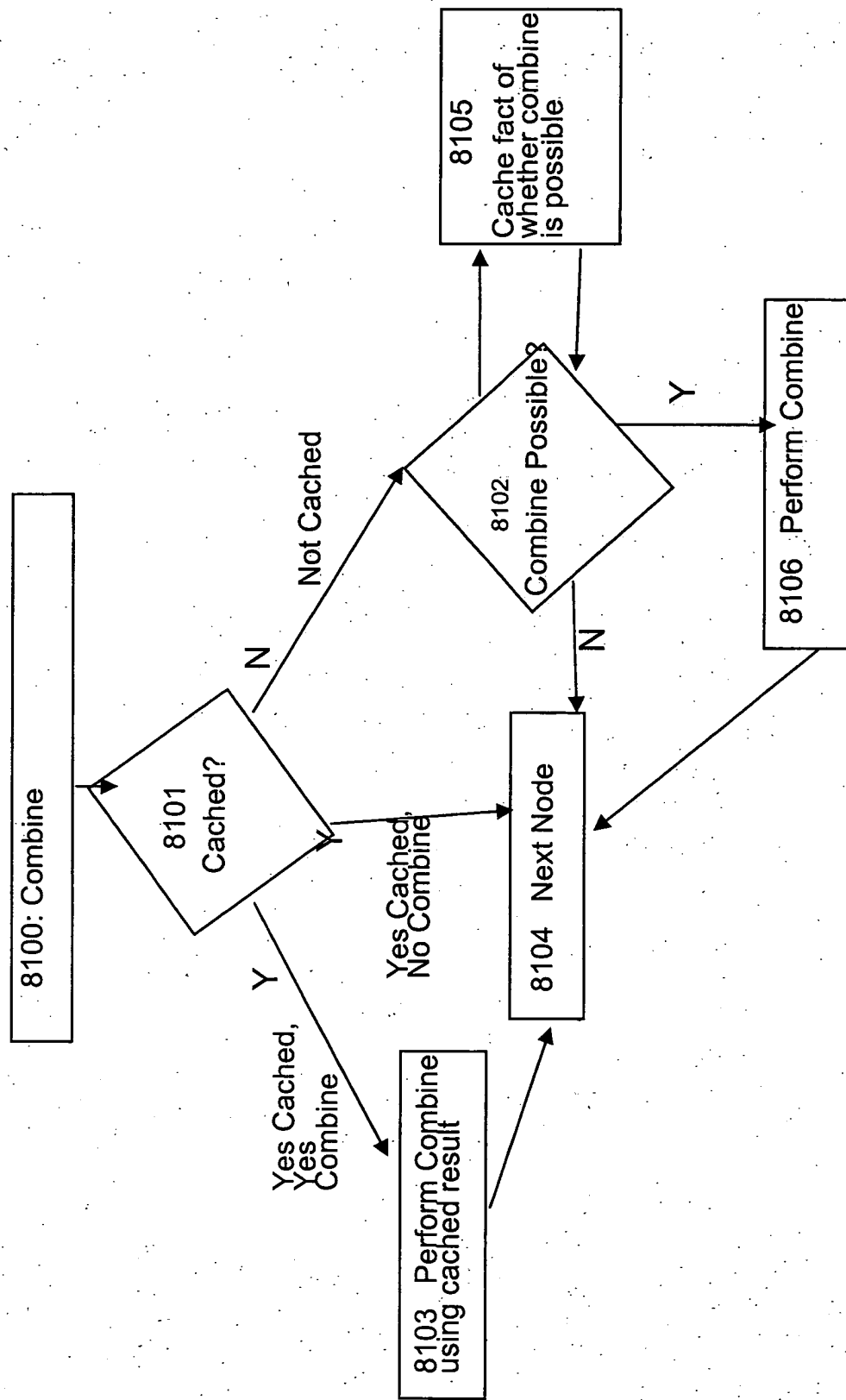


FIGURE 8

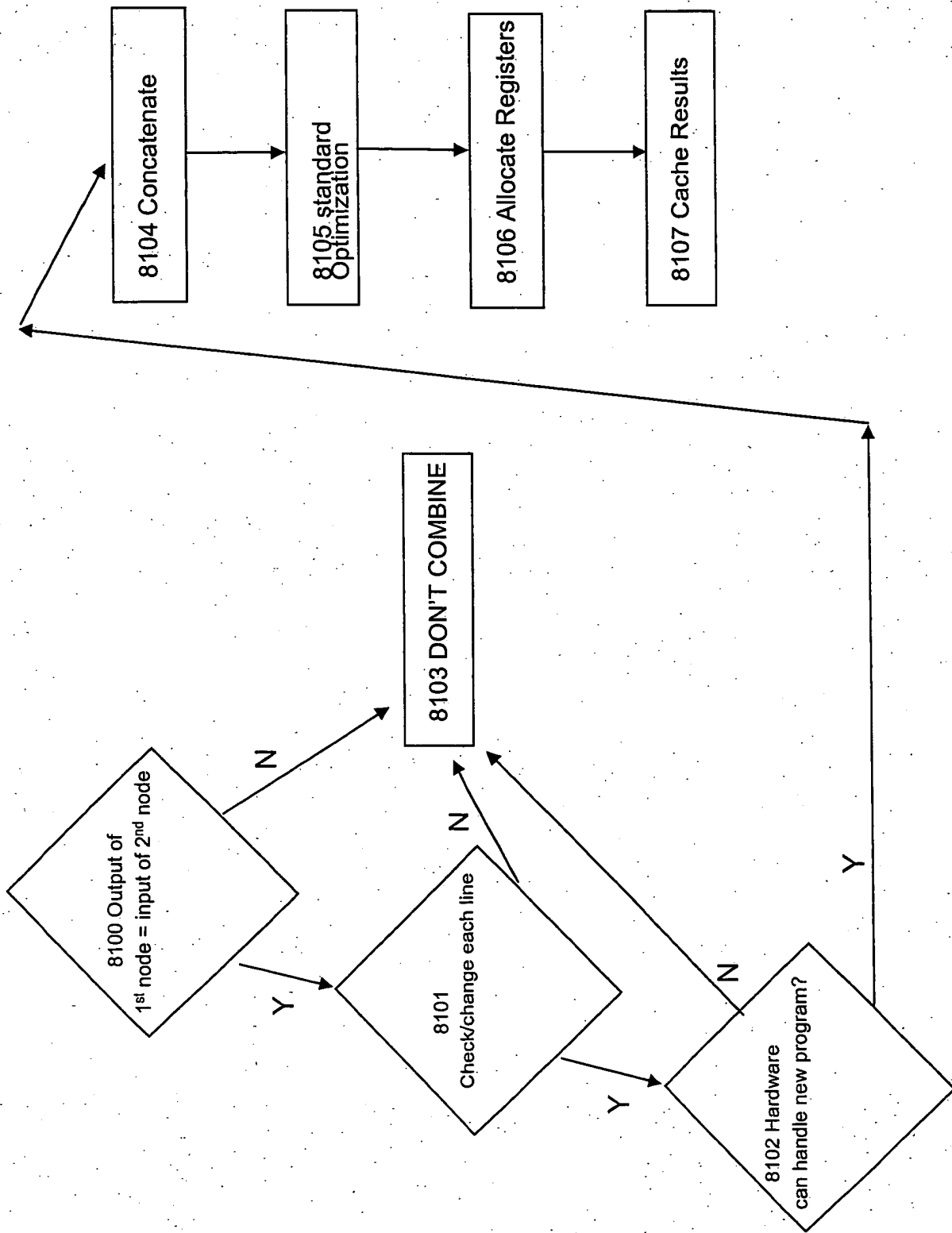


FIGURE 9

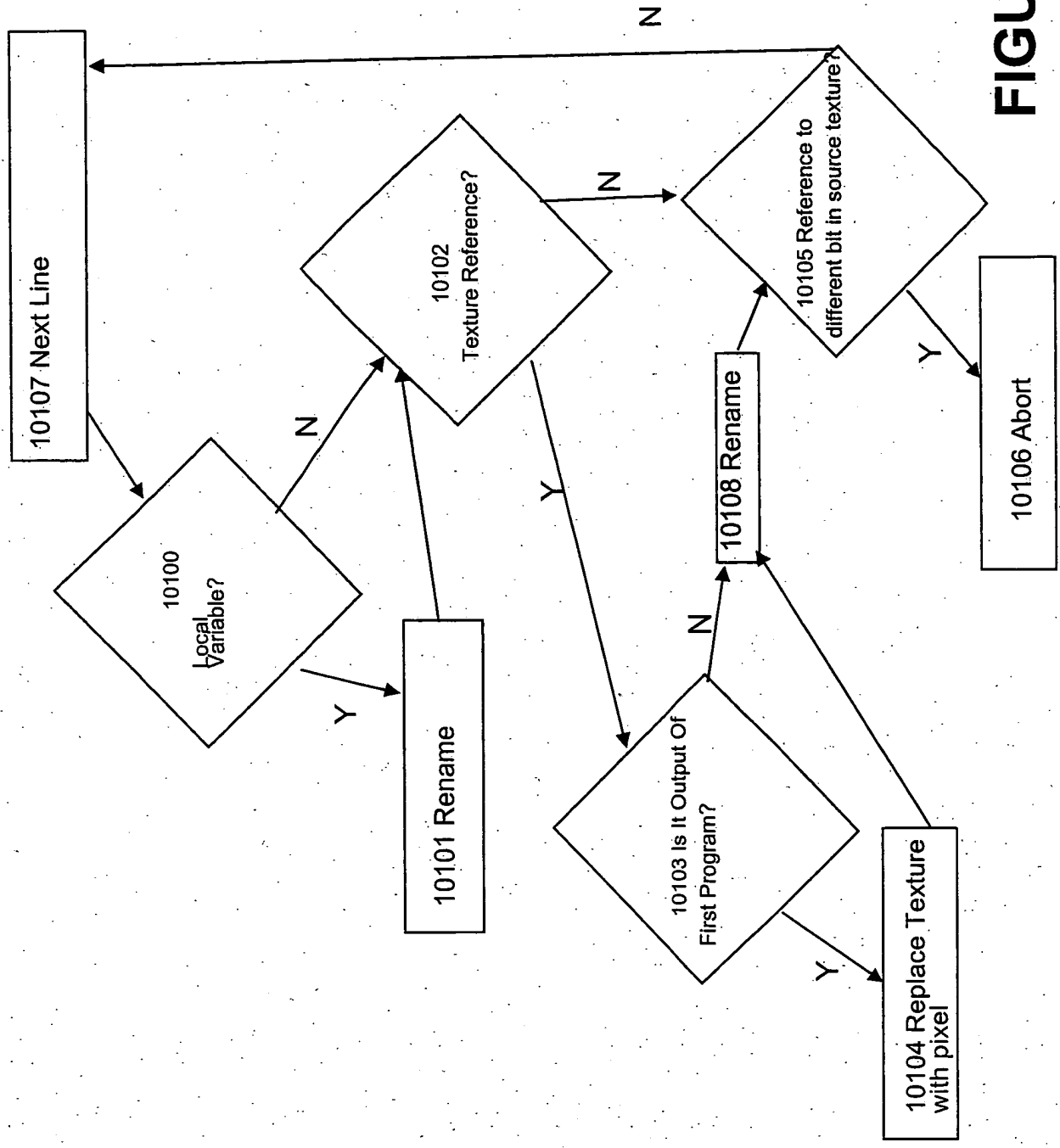
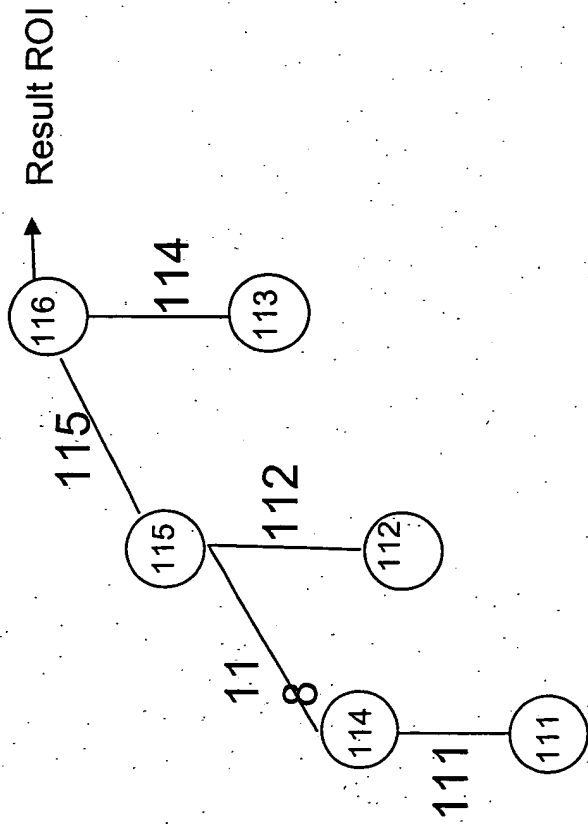
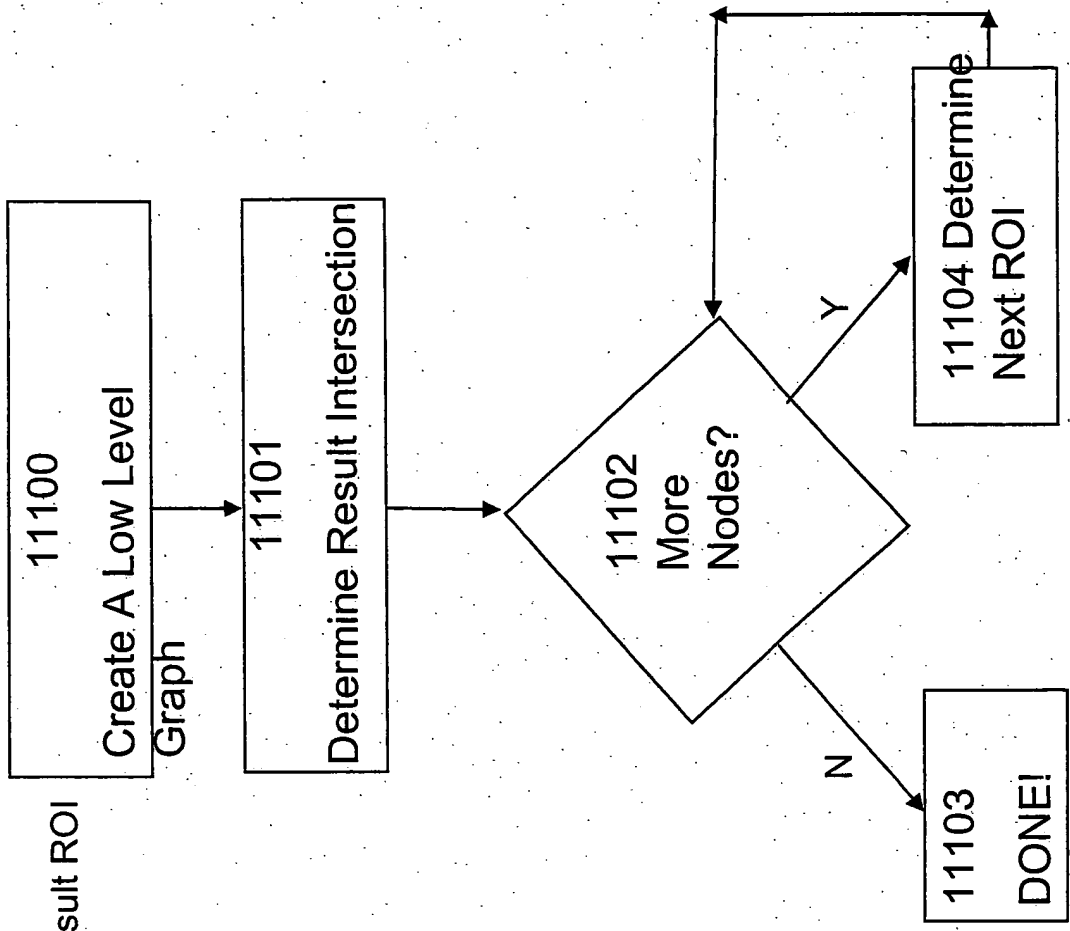


FIGURE 10



11(a)



11(b)

Figure 11

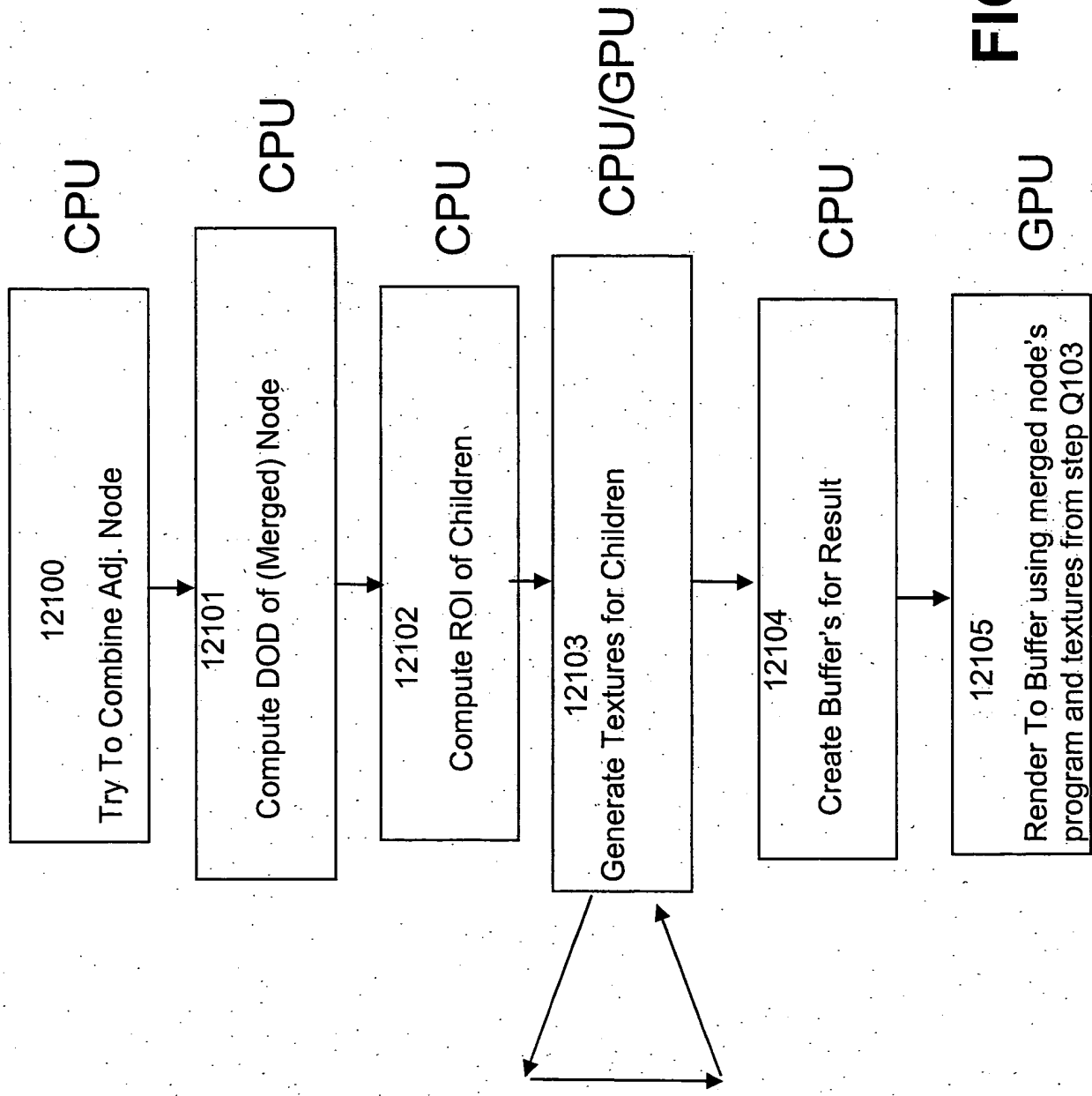


FIGURE 12

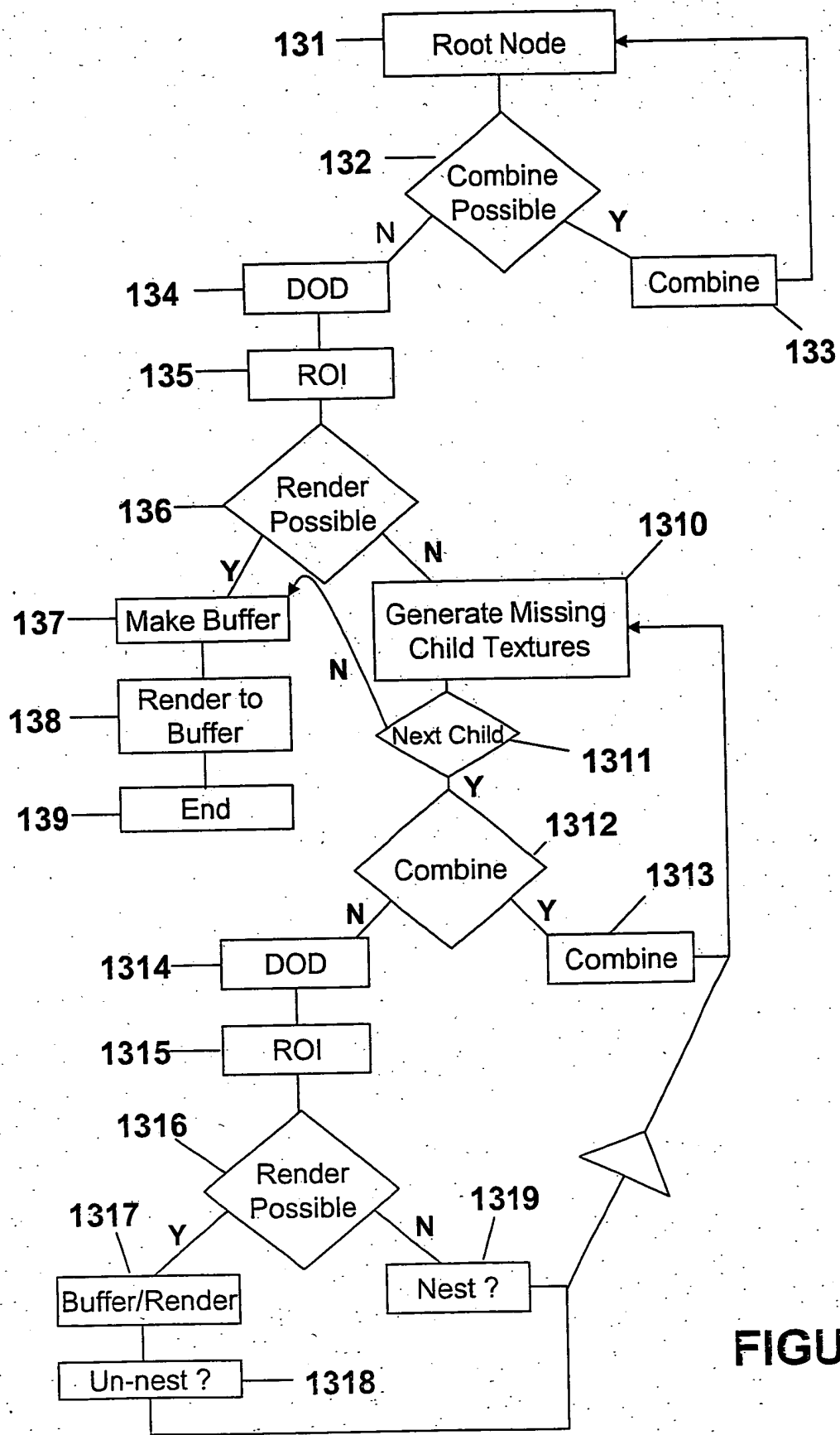


FIGURE 13

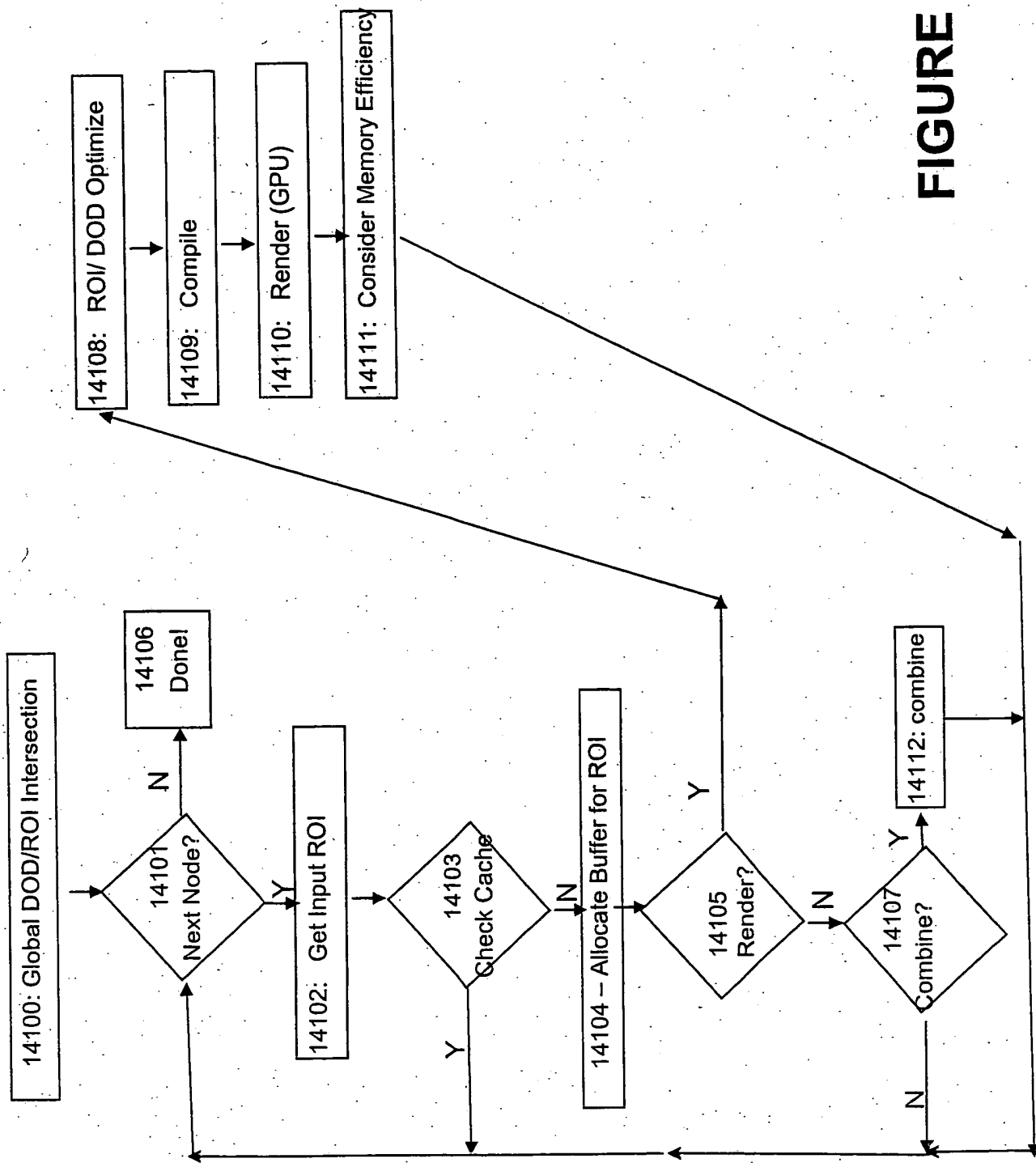


FIGURE 14

CPU		GPU
Time 1	Frame 1	Prior Task
Time 2	Frame 2	Frame 1
Time 3	Frame 3	Frame 2
Time 4	Frame 4	Frame 3
Time 5	Frame 5	Frame 4
Time 6	Frame 6	Frame 5
Time 7	Frame 7	Frame 6

15(a)

FIGURE 15(a) & 15(b)

	P1	P2	P3	P4
Time 1	Frame 1			
Time 2	Frame 2	Frame 1		
Time 3	Frame 3	Frame 2	Frame 1	
Time 4	Frame 4	Frame 3	Frame 2	Frame 1
Time 5	Frame 5	Frame 4	Frame 3	Frame 2
Time 6	Frame 6	Frame 5	Frame 4	Frame 3
Time 7		Frame 6	Frame 5	Frame 4

15(b)

FIGURE 15(c)

CPU		GPU
Time 1	Frame 1, effect 1	
Time 2	Frame 2, effect 1	Frame 1, effect 2
Time 3	Frame 1, effect 3	Frame 2, effect 2
Time 4	Frame 2, effect 3	Frame 1, effect 4
Time 5	Frame 3, effect 1	Frame 2, effect 4
Time 6	Frame 4, effect 1	Frame 3, effect 2
Time 7	Frame 3, effect 3	Frame 4, effect 2
Time 8	Frame 4, effect 3	Frame 3, effect 4
		Frame 4, effect 4

15(c)

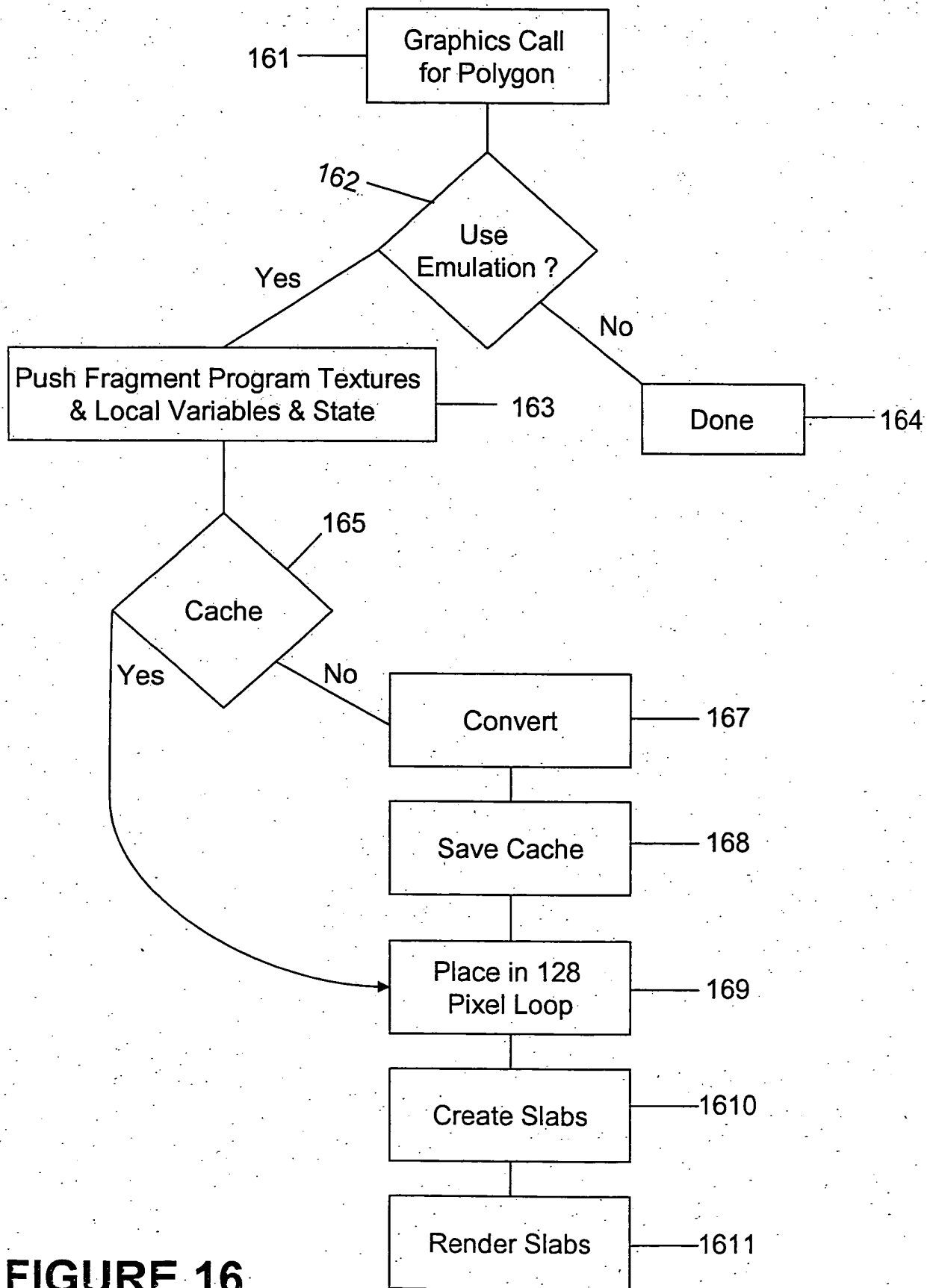
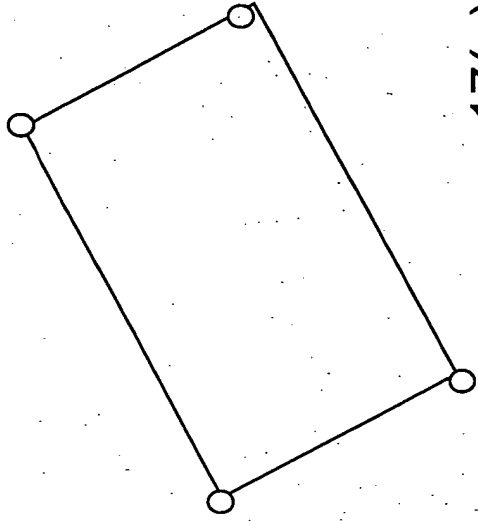
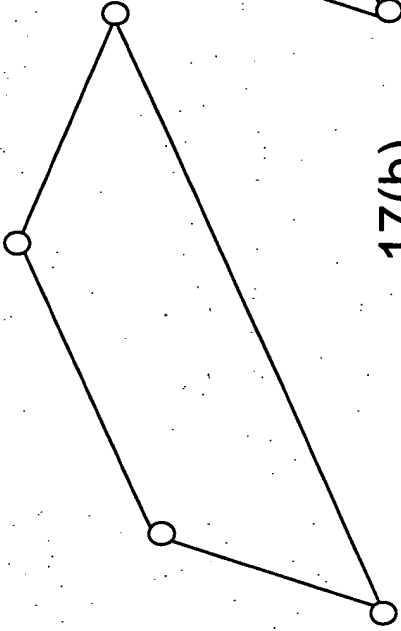
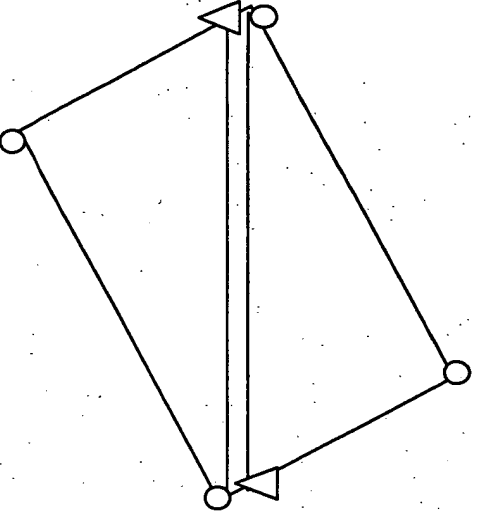


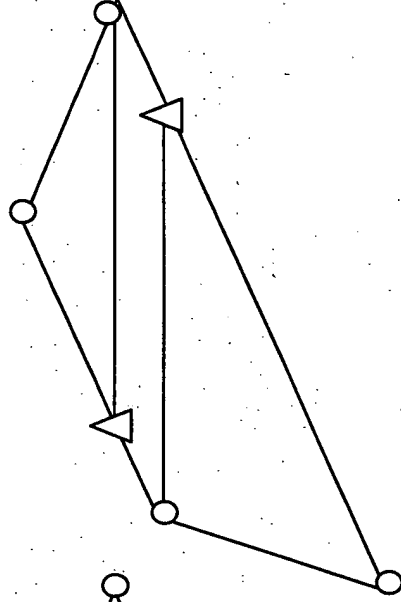
FIGURE 16



17(a)



17(b)



Figures 17(a) & 17(b)